

Remarks

Status of application

Claims 1-45 were examined and claims 1-28 and 30-45 stand rejected in view of prior art. Claim 29 is objected to as being dependent upon a rejected base claim, but is indicated as being allowable if rewritten in independent form. In view of the amendments to the claims and the remarks made herein, reexamination and reconsideration are respectfully requested.

The invention

Applicant's invention provides an event and notification service which operates at the Object Request Broker (ORB) level rather than at the user level. When a supplier pushes an event to a consumer(s) through an event channel, the ORB directly queues and routes event messages to downstream consumer(s) without un-marshaling and re-marshaling. The exception is that if filtering is involved, message bodies may be partially un-marshaled for filtering purposes. However, even if there are filters, Applicant's system does not re-marshal event message bodies. Instead, the original event payloads (message bodies) are retained and used for forwarding after filtering. During routing of GIOP (General Inter-ORB Protocol) events, the solution also uses a series of advanced techniques to adjust their payload alignment and/or to block delivery of messages when the payload is misaligned.

With Applicant's approach, the event channel generally only requires the reading of the message headers. The body (or payload) of the event message is treated as raw data and does not need to be un-marshaled and re-marshaled. Efficiency is increased as the system is not required to un-marshal (decode) the message payload at the event channel, read and understand the raw data, and then re-marshal (encode) this raw data (the message body or payload) at the event channel in order to properly deliver the message to consumers. In handling typed event replicating, the channel directly appends any original message payload (body) that is received to the outgoing request messages. Therefore, regardless of the number of consumers of a given event, the total number of encodings (i.e., re-marshaling) is zero and the total number of decodings (i.e., un-marshaling) is either zero (no filter) or one (with filter). In addition, because the

encoding is only for filtering, the channel may only partially decode the payload for filter evaluation. This approach enables Applicant's invention to provide improved performance (event throughput) when compared to previous typed event channel implementations.

Prior art rejections

The Examiner has indicated that claim 29 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In order to expedite prosecution of the present application, Applicant has amended the claims to incorporate the features which the Examiner has already indicated to be allowable over the art. More particularly, Applicant has amended independent claim 18 by adding the limitations of claim 29 so as to include in amended claim 18 those features which the Examiner has indicated are allowable over the art. Applicant has canceled dependent claim 29 and has amended dependent claims 26, 28, 31 and 33 based on these amendments.

Applicant has also amended independent claim 1 to incorporate the features that the Examiner has indicated to be allowable into independent claim 1. Dependent claims 15 and 17 have been amended to reflect the amendments to claim 1.

In addition, Applicant has amended independent claim 34 to incorporate those features the Examiner has indicated to be allowable into independent claim 34. Claim 41 has been canceled and claim 42 has been amended based on the amendment to claim 47.

Applicant's amended claims are believed to distinguish over the art because, for example, the prior art of record does not include the claim limitations of an indicator which enables a user to specify whether or not to adjust the message header if necessary to properly align the payload, which indicator enables delivery of a message to be blocked if the payload is determined to be misaligned. These features are not disclosed, taught, or suggested by the prior art references, either alone or in combination. For example, in paragraph 35 of the Office Action the Examiner references U.S. Patent 6,961,939 to Anderson et al (hereinafter "Anderson") for the teaching of an indicator enabling a user to specify whether to adjust the message header if necessary to properly align the payload of a message which is determined to be misaligned. However, a review

of the cited portions of the Anderson (as well as the balance of the reference) do not find any reference to an indicator comparable to that described in Applicant's specification and claims. Instead, Anderson describes a fragment-offset variable can be read following breaking a message into two or more submessages so as to determine the location of a byte of a submessage with respect to its relative position in the original message. In particular, Anderson and the other prior art references do not include the specific teachings of an indicator that enables a user to block delivery messages if the message payload is determined to be misaligned as provided in Applicant's specification and claims.

Based on the above-described amendments, Applicant believes that independent claims 1, 18 and 34, and all dependent claims thereof, are now in condition for allowance.

Any dependent claims not explicitly discussed are believed to be allowable by virtue of dependency from Applicant's independent claims, as discussed in detail above.

Conclusion

In view of the foregoing remarks and the amendment to the claims, it is believed that all claims are now in condition for allowance. Hence, it is respectfully requested that the application be passed to issue at an early date.

If for any reason the Examiner feels that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned at 925 465-0361.

Respectfully submitted,

Date: July 10, 2007

/G. Mack Riddle/

G. Mack Riddle, Reg. No. 55,572
Attorney of Record

925 465-0361
925 465-8143 FAX